

R E M A R K S

Claims now in this case are 19 through 41, all of which are being freshly presently herein in the interests of more effectively defining the present invention in view of a substantial quantity of art submitted herewith. Reconsideration is respectfully requested in view of the present form of the claims, the art and the detailed treatment below.

A comprehensive search was conducted in relation to the subject matter of the application in the interests of locating and defining the prior art. As a result, the following references (three categories) are treated below:

Survey Systems:

4,345,315	Cadotte et al.
4,355,372	Johnson et al.
4,584,602	Nakagawa
4,566,030	Nickerson et al.
4,578,700	Roberts et al.
4,603,232	Kurland et al.

Special Purpose Systems:

Japanese Application 52-17740 (translation attached)	
4,017,835	Randolph
4,320,256	Freeman
4,451,700	Kempner et al.
4,523,055	Hohl et al.
4,539,435	Eckmann
4,674,044	Kalmus

Transaction Telephones:

"Telepayment and Electronic Money, The Smart Card" - A. Turbat

"Transaction - Telephone Gets the Facts at the Point of Sale" - V. Scott Borison

"Voice and Data Workstations and Services in the ISDN" - Goran Eriksson

"The TV 200, A Transaction Telephone" - M. Demeautis

"Low Cost Point-Of-Sale Terminal" - J. Svigals

Before considering the art in detail, some general considerations are deemed pertinent in relation to the present development. In the three classes of references, the first group involves Survey Systems used, for example, to gather data on television viewing patterns or to poll a group of people with regard to market products. The functions of Survey Systems essentially are communication and data collection.

The second group of references (Special Purpose Systems) each address a specific communication problem. That is, the systems perform a special-purpose function in cooperative use with some form of telecommunications structure.

The third class of references, Transaction Telephones, are essentially terminal apparatus to accommodate special-purpose functions in telecommunications. Although some cooperative data collection systems are mentioned, the systems primarily address a form of telephone instrument terminal.

The cited reference, "Voice Mail", of the Office Action (Paper No. 2) is treated separately.

An overview of the references reveals a distinct functional capability with regard to applicant's system. While the prior art addresses communication, data collection and a few limited processing operations, applicant's system

attains considerably increased capability. Specifically, applicant's development variously incorporates the functions of: (1) personal participant selectivity, (2) participant record development and (3) analytical inter-related data processing with respect to developed records. These functions are accomplished by specific structure and process steps integrated into applicant's system as treated below in relation to specific of the references as cited above.

At this point, consider the classes of references in somewhat greater detail. The Survey Systems primarily relate to the gathering of information. Each of the Survey System patents discloses a special form of terminal apparatus at a data source, e.g. at a monitored television receiver. Specifically, the distinct forms of terminals are disclosed in these patents as indicated below:

<u>Patent (Survey Systems)</u>	<u>Terminal Disclosure Location</u>
4,345,315 (Cadotte et al.)	Figure 1
4,355,372 (Johnson et al.)	Figure 14
4,584,602 (Nakagawa)	Terminal 17, Figure 1
4,566,030 (Nickerson et al.)	Control unit 20, Figure 1
4,578,700 (Roberts et al.)	T.V. monitor, Figure 1
4,603,232 (Kurland et al.)	Unit 20, Figure 1

Contrary to the operations of the systems described in the above references, applicant's system interfaces with a conventional telephone instrument. The interface is accomplished by incorporating a voice generator apparatus (to queue the user) and a digital interface (to provide digital data from

dial tone signals). In that regard, although the Survey System patents disclose structures distinct from applicant's system, some are mentioned below in relation to various other features as presented in the claims.

The references involving special forms of terminal equipment, e.g. Group 3, Transaction Telephones, are similarly distinct from applicant's system. In recent years, a variety of special-purpose telephone instruments have been proposed for providing various forms of data. Clearly, such telephones could be employed in cooperation with applicant's system; however, a very significant feature of applicant's system is its ability to function cooperatively with a conventional telephone instrument. Accordingly, specific forms of transaction telephone instruments or data phones are not deemed to be particularly applicable to the claims as set forth herein all of which define a specific distinguishing component of applicant's statistical analysis system.

Turning now to the next class of art, the references disclosing Special Purpose Systems are tabulated below with respect to the function of each special system.

<u>Patent</u>	<u>Function</u>
Japan. App. 52-17740	Racehorse betting
4,017,835 (Randolph)	Credit status verification
4,320,256 (Freeman)	Message delivery
4,451,700 (Kempner et al.)	Audience polling
4,523,055 (Hohl et al.)	Voice mail
4,539,435 (Eckmann)	Testing
4,674,044 (Kalmus)	Securities trading

The Freeman patent (4,320,256) merits initial consideration. Freeman and Eckmann (4,539,435) are the only references that disclose an interface means for accommodating voice and digital communication with a conventional telephone instrument. However, Freeman is limited to distinct functions. First, Freeman discloses a system whereby select messages may be provided which are of interest to individual callers from multi-track message reproduction networks 36. Also, according to Freeman, callers may be polled, their responses being tallied in pulse counters 40, 42 (Figure 1) and so on. The system is limited to those specific functions.

The Eckmann patent is somewhat similar in that it simply discloses a minicomputer utilizing a plurality of magnetically encoded discs which contain files for communication with callers to provide a simulated conversation.

Neither Freeman nor Eckmann disclose or suggest structure for initiating a file and storing identification data nor structure for statistical digital data on individual callers. Furthermore, neither of the references disclose means for analyzing recorded data in a processing manner to isolate a select subset of callers, by inter-related processing. For example, such elements are explicitly stated in newly presented claim 19 and are deemed to clearly distinguish the references, Freeman and Eckmann.

The "Voice Mail" reference (cited) is somewhat similar to the Eckmann and Freeman references as related to applicant's system. The "Voice Mail" system is special-purpose in nature, and operates to perfect time-offset communication. The system does not process data in any interrelated pattern.

As indicated above, the Kempner patent (4,451,700) discloses a form of a telephonic communication albeit void of digital capability at the calling instrument. That is, callers are given two-choice questions, e.g. yes/no, like/dislike, agree/disagree, for/against, and so on (see Column 4, line 16). Note that consequently, the reference system requires "latches" (194 and 196, Figure 4) for staging data. Accordingly, applicant's distinctly claimed interface means (claim 19) distinguishes Kempner. Kempner is essentially a polling system. That is, the reference is distinguished by claim 19 on the same basis of data processing as Freeman and Eckmann.

Summarizing with respect to claim 19 as exemplary, the detailed structure of the recited "interface means" distinguishes all references excepting Freeman and Eckmann which are distinguished by the recitations of applicant's "record means" and "analysis means".

Dependent claims 20 through 34 add various limitations to the basic combination of claim 19. Some of the added elements are disclosed in various of the references; however, the combination is deemed distinct. For Examiner's information, the added elements of these dependent claims are

relative to cited references as tabulated below along with reference to the disclosure location in applicant's specification.

<u>Claim</u>	<u>Limitation</u>	<u>Reference</u>	<u>Applicant's Specification</u>
20	assign caller designation	—	P. 13, l. 21
21	communicate designation to caller	—	P. 14, l. 27
22	record call number	—	P. 10, l. 35; P. 11, l. 5
23	encrypt. designation	—	P. 13, l. 28
24	ack. no.; design. no.	—	P. 14, l. 27
25	confirm designation	—	P. 14, l. 33
26	call sequence	—	P. 13, l. 20
27	qualify callers	Eckmann C. 4, l. 67	P. 9, l. 18
28	check off caller	—	P. 12, l. 16
29	one-time use	—	P. 12, l. 16
30	scoring calls	—	P. 12, l. 16
31	billing ID	Japan. App.	P. 10, l. 7
32	introduce external data	Japan. App.	P. 16, l. 8
33	subset comparison	—	P. 27, l. 14
34	abort capability	—	P. 19, l. 7

Claim 35 sets forth the basic interface structure as specified in claim 19 along with a voice generator means and

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LIVE  
HUMAN TIME  
BILLING*

processing means. However, claim 35 further recites a test structure for qualifying calls (described at the bottom of page 21 in the specification). The structure tallies or scores numbers of calls with respect to a given period of time. Accordingly, the statistical analysis system provides a check or restraint control which limits excessive use by particular callers. The structure is deemed distinct from the prior art and patentable.

Independent claim 36 again recites the basic interface and vocal communication elements, however, further recites the structure for "assigning individual designations" to callers as treated at length beginning at line 17 on page 13 in the specification. The distinction is based on recognizing that confirmation and identification of callers may be exceedingly important in applicant's statistical analysis system. The limitation is deemed to distinguish the references of record.

Claim 37 again recites the basic interface and vocal communication, however, introduces the element of a manual terminal along with means for aborting the digital interface. As indicated above, the structure is described on page 19 of the specification and is deemed to distinguish the reference art. Claim 38 recites a specific form of processing in combination with the elements of claim 37 as a further distinction.

The claim 39 recites the basic combination as repeatedly treated above along with distinct storage elements. In addition to initiating a file, the system incorporates structure for assigning individual designations and recalling stored data from the files on such basis. The combination is described in the specification and accommodates retrieval of data from storage for use in subsequent operation. See the specification beginning at the top of page 22. The combination of elements as set forth is deemed to distinguish the references of record and thereby define patentable subject matter.

Claim 40 involves the interface-voice generator combination along with an element for assigning individual designations to callers including representations of the telephone number for the calling terminal. The structure and operation is described at the top of page 11 of the specification and affords an automatic basis in view of current telephone technology for identifying callers somewhat automatically.

In the framework of the basic combination, claim 41 is similar to claim 40, however, is distinct in that individual designations applied to callers are encrypted, for example, as treated at the top of page 14 in the specification. The distinction again is deemed to support a patentable combination.

Copies of the referenced art are attached for Examiner's convenience. In view of the present form of the claims with respect to the art, Examiner's reconsideration is respectfully requested with a view toward allowance.

Respectfully submitted,



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